

In the Claims:

Please enter the following amended claims 10, 14, and 18:

10. (Once Amended) A process for etching silicon oxynitride which comprises the steps of:

depositing a layer of polycrystalline silicon overlying a substrate;

depositing a layer of silicon oxynitride overlying the layer of polycrystalline silicon;

pattern etching the layer of silicon oxynitride and the layer of polycrystalline silicon; and

etching the remaining layer of silicon oxynitride in a phosphoric acid etchant without subjecting the layer of silicon oxynitride to any temperature greater than about 400°C after the step of depositing the layer of silicon oxynitride.

14. (Once Amended) A process for fabricating a semiconductor device comprising the steps of:

depositing a layer of polycrystalline silicon overlying a substrate;

depositing a first layer of oxide to a thickness of between about 7.5nm and 10nm by chemical vapor deposition from a TEOS source overlying the layer of polycrystalline silicon;

depositing a second layer of silicon oxynitride overlying the first layer to a thickness of between about 25nm and about 30nm by plasma enhanced chemical vapor deposition;

pattern etching the first and second layers and the layer of polycrystalline silicon;
and

etching the second layer in an etchant comprising hot phosphoric acid, the etching occurring before the second layer is subjected to any temperature greater than about 400°C.

18. (Thrice Amended) A process comprising:

providing a semiconductor substrate;

forming a gate oxide above the semiconductor substrate;

forming a first polycrystalline silicon layer over the gate oxide;

forming an interpoly dielectric;

forming a second polycrystalline silicon layer over the interpoly dielectric;

depositing a layer of silicon oxynitride above the second polycrystalline silicon layer;

pattern etching the device to form a stack; and

removing the layer of silicon oxynitride without subjecting the layer of silicon oxynitride to a temperature greater than about 400°C after the step of depositing the layer of silicon oxynitride.

Please cancel claim 19.

Please enter the following amended claims 20 and 24:

20. (Once Amended) The process of claim 18, wherein the layer of silicon oxynitride is deposited by a plasma enhanced chemical vapor deposition process using the reactants N_2O and SiH_4 .

24. (Once Amended) The process of claim 18, wherein the removing of the layer of silicon oxynitride comprises the step of etching with hot phosphoric acid.

Please cancel claim 25.

Please enter the following amended claim 26:

26. (Twice Amended) A process comprising:
depositing a layer of polycrystalline silicon over a substrate;
depositing a layer of silicon oxynitride above the layer of polycrystalline silicon;
pattern etching the layer of silicon oxynitride and the layer of polycrystalline silicon to form a stack; and

removing the layer of silicon oxynitride before subjecting the layer of silicon oxynitride to a temperature greater than about 400°C after the step of depositing the layer of silicon oxynitride.

Please cancel claim 27.

Please enter the following amended claims 28 and 31:

28. (Once Amended) The process of claim 26, wherein the layer of silicon oxynitride is deposited by a plasma enhanced chemical vapor deposition process using the reactants N_2O and SiH_4 .

31. (Once Amended) The process of claim 26, wherein the removing of the layer of silicon oxynitride comprises the step of etching with hot phosphoric acid.

Please cancel claim 32.